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MADRAS RECORD OFFICE.

Government of Madras.

Public works DEPARTMENT.

G.O. No. 2851-52 Press ~~Mis.~~

183-86

Dated 10 · 11 1871.

Not to be folded or roughly handled

Proceedings of the Madras Government, Public Works Department,
10th November 1871.

No. 183. Read the following papers :—

From R. SMITH, Esq., Executive Engineer on special duty, Madura District, to the Acting Chief Engineer for Irrigation, dated Madura, 10th October 1871, No. 220.

I HAVE the honour to submit the subjoined report showing the progress made with the Perryaur investigations during the past month.

2. The contour survey of the country west of the Nellacumputty Tavalum has progressed as rapidly as the difficult nature of the ground would admit of. The elephant grass is very high this year, and retards operations occasionally.

3. Judging from what has been ascertained up to date, it may, I think, be safely assumed that the best site for the Perryaur Head-works will be found in, or adjoining, the tract now being surveyed. Lieutenant Greer reports there are two sites between the stream that falls into the Perryaur in longitude 77° 13′, and the sharp bend in this river in longitude 77° 10′ 30″, and one site about 440 yards below the bend. The last does not, however, seem to be a desirable one, as the bed of the Perryaur is 34′ lower there than it is at the sites above the bend, but it is possible that subsequent investigations may place it in a more favourable light. Escape saddles have been found for both sites above the bend, and there are two streams that could probably be converted into silting channels.

4. As it is now evident that a detailed survey and examination of *several* sites must be made before the close of this working season, I have to solicit early sanction for Rupees 4,500, in addition to the amount sanctioned in G. O., No. 1,400, of 22nd May last for expenditure, on preliminary investigations, in the Perryaur hill tracts during the current year.

5. The register and diagram showing the discharge of the Perryaur and the rainfall at the Perryaur camps during the past month are enclosed.

6. The plans and estimates for the head-works designed for sites Nos. 2 and 3, and for the works in the plains, will be submitted about the end of this month.

PERRYAUR PROJECT.

Table of Rainfall and Discharge of Perryaur during September 1871.

Date.	Rainfall at		Hours.	Water level in feet above datum.	Discharge.	
	Perryaur Camp.	Hythry Tavalum.			Cubic feet per second.	1,000 Cubic yards per day.
	INCHES.	INCHES.				
1st September ...	0·02	0·03	6 A. M. 6 P. M.	0·69 0·60	5,115 483	1,597
2nd ,, ...	0·23	0·16	6 A. M. 6 P. M.	0·45 0·42	435 426	1,378
3rd ,, ...	1·15	0·48	6 A. M. 6 P. M.	0·45 0·45	435 435	1,392
4th ,, ...	0·03	0·02	6 A. M. 6 P. M.	1·30 1·05	752 649	2,242
5th ,, ...	0·41	0·05	6 A. M. 6 P. M.	2·03 1·30	1,160 752	3,059
6th ,, ...	0·15	0·05	6 A. M. 6 P. M.	3·55 1·90	2,079 1,074	5,045
7th ,, ...	0·16	0·45	6 A. M. 6 P. M.	1·80 1·45	1,012 821	2,933

Proceedings of the Madras Government, Public Works Department,
10th November 1871.

Table of Rainfall and Discharge of Perryaur during September 1871.—(Concluded.)

Date.	Rainfall at Perryaur Camp.	Rainfall at Hythry Tavalum.	Hours.	Water level in feet above datum.	Discharge. Cubic feet per second.	Discharge. 1,000 Cubic yards per day.
	Inches.	Inches.				
8th September ...	0·09	0·27	6 A. M. 6 P. M.	1·82 1·62	1,024 905	3,086
9th ,, ...	0·25	0·52	6 A. M. 6 P. M.	1·40 1·80	798 1,011	2,894
10th ,, ...	0·28	0·42	6 A. M. 6 P. M.	2·27 2·75	1,318 1,602	4,672
11th ,, ...	0·06	0·05	6 A. M. 6 P. M.	2·30 1·92	1,337 1,087	3,878
12th ,, ...	0·42	0·51	6 A. M. 6 P. M.	1·75 1·52	981 855	2,938
13th ,, ...	0·16	0·30	6 A. M. 6 P. M.	1·66 1·92	927 1,087	3,222
14th ,, ...	0·01	0·10	6 A. M. 6 P. M.	1·75 1·45	981 821	2,883
15th ,, ...	0·02	0·25	6 A. M. 6 P. M.	1·30 1·22	752 714	2,346
16th ,, ...	0·01	0·01	6 A. M. 6 P. M.	1·25 1·05	731 649	2,208
17th ,, ...	0·00	0·06	6 A. M. 6 P. M.	0·95 0·87	609 579	1,901
18th ,, ...	0·00	0·13	6 A. M. 6 P. M.	0·95 0·80	609 554	1,861
19th ,, ...	0·00	0·15	6 A. M. 6 P. M.	0·65 0·65	501 501	1,603
20th ,, ...	0·00	0·06	6 A. M. 6 P. M.	0·52 0·48	457 444	1,442
21st ,, ...	0·05	0·05	6 A. M. 6 P. M.	0·37 0·37	413 413	1,322
22nd ,, ...	0·01	0·01	6 A. M. 6 P. M.	0·33 0·37	402 413	1,344
23rd ,, ...	0·06	0·02	6 A. M. 6 P. M.	0·35 0·25	408 384	1,267
24th ,, ...	0·00	0·00	6 A. M. 6 P. M.	0·25 0·33	384 402	1,258
25th ,, ...	0·00	0·01	6 A. M. 6 P. M.	0·25 0·20	384 372	1,210
26th ,, ...	0·14	0·01	6 A. M. 6 P. M.	0·12 0·07	384 314	1,069
27th ,, ...	0·15	0·44	6 A. M. 6 P. M.	0·10 0·30	349 396	1,192
28th ,, ...	0·03	0·01	6 A. M. 6 P. M.	0·38 0·42	415 426	1,346
29th ,, ...	0·17	0·06	6 A. M. 6 P. M.	0·25 0·15	384 361	1,192
30th ,, ...	0·04	0·12	6 A. M. 6 P. M.	0·25 0·33	384 402	1,258
Total...	4·10	4·80	......	......	......	65,038

Depth run off from Catchment Basin of 250 square miles = 3·02 inches.

Mean discharge ... ... { 2,167,933 Cubic yards per diem.
90,330 ,, ,, per hour.
677 ,, feet per second.

	Cubic yards.
Discharge of Perryaur in September 1869	67,424,000
,, of ,, in ,, 1871	65,038,000
Difference—Excess in September 1869...	2,386,000

Madura,
10th October 1871.

(Signed) R. SMITH,
Executive Engineer on special duty,
Madura District.

Proceedings of the Madras Government, Public Works Department,
10*th November* 1871.

No. 184. From the Executive Engineer on special duty, Madura District, to the Acting Chief Engineer for Irrigation, dated Madura, 25th October 1871, No. 242.

As directed in your letter No. 171 of 20th instant, I have the honour to submit the subjoined estimate of the probable sum required to complete the field work in the Perryaur hill tracts.

	RS.
Clearing jungle	1,400
Sinking trial-pits	2,000
Erecting huts	200
Petty establishment	500
Salaries of Lascars required at the old camp in connection with the gauging of the Perryaur	240
Sundries	160
Total...	4,500

2. From Lieutenant Greer's recent letters it appears that the central or No. 2 site is the best of the three alluded to in my monthly report for September last; but the country is evidently so very deceptive in those parts that nothing can be safely assumed until the completion of the contour survey. Lieutenant Christie's description of the Perryaur valley below the bend is probably correct, and if his conjecture regarding the non-existence of a site for the reservoir embankment is verified, no expenditure will be incurred there.

No. 185. ORDER THEREON, 10th November 1871, No. 2,851.

IRRIGATION, No. 9.

As the Perryaur Project is proposed to be undertaken from Loan funds, and the Government of India have authorized the cost of the Survey establishment employed in connection with it to be charged to those funds, and as the Reserve under Agricultural Ordinary has been exhausted, the sanction of that Government will be requested to the appropriation of the sum of Rupees 4,500 which is stated to be urgently required for completing the field work in the Perryaur hill tracts, from the grant for the Pelandorai Project in the South Arcot District (Item No. 38) on which the outlay, it is expected, will fall short of the allotment, as it is of the utmost importance that the investigation of the project should be completed as expeditiously as possible.

(True Extract.)

(Signed) J. CARPENDALE, Colonel, R.E.,
Secretary to Government.

No. 186. (DOCKET No. 2,852, dated 10th November 1871.)

COPY of the above forwarded to the Government of India.

(True Extract.)

Colonel, R.E.,
Secretary to Government.

Exd. E. C. Shunker.

No. 220 Special Executive Engineer's Office
Madura 10th October 1871

From,

The Executive Engineer
On Special duty
Madura Distt.

To,

The Actg. Chief Engineer
for Irrigation
Fort Saint George

Sir,

I have the honor to submit the subjoined Report showing the progress made, with the Perryaur investigations, during the past month.

2. The Contour survey, of the Country West of the Nellacumpatty Tavalum, has progressed as rapidly as the difficult nature of the ground would admit of. The Elephant grass

is

is very high, this year, and retards operations occasionally. —

3. Judging from what has been ascertained, up to date, it may, I think, be safely assumed, that the best site, for the Perryaur Head works, will be found in, or adjoining, the tract now being surveyed — Lieutenant Greer reports there are 2 sites between the stream, that falls into the Perryaur, in longitude 77° 13', and the sharp bend, in this river, in longitude 77° 10' 30"; and one site about 440 yards below the bend — The last does not, however, seem to be a desirable one, as the bed, of the Perryaur, is 34' lower there, than it is at the sites above the bend, but

7

but it is possible that subsequent investigations may place it in a more favourable light. Escape saddles have been found for both sites, above the bend, and there are two streams that could, probably, be converted into silting channels.

4 As it is now evident that a detailed survey, and examination, of several sites must be made, before the close of this working season, I have to solicit early sanction for Rs 4,500 in addition to the amount sanctioned in G.O. No. 1400, of 22d May last, for expenditure on preliminary investigations on the Perryaur Hill tracts, during the current year.

5. The Register and Diagram

showing

showing the discharge of the Perryaur, and the rain-fall, at the Perryaur Camps, during the past month are enclosed.

6. The Plans and estimates, for the Headworks, designed for sites Nos 2 and 3, and for the works in the Plains, will be submitted about the end of this month.

I have the honor to be
Sir,
Your Most Obedient Servant
[signature]
Executive Engineer
On Special duty
Madura Dist.

Public Works 1871 Department

~~Pro. Proceedings~~ No. 220

~~Act. 000~~

From — No. 5242

The Executive Engr.

On Special duty

Madura Distt.

To

The Actg. Chief Engr.

for Irrigation

Fort Saint George.

Dated 10th } October 1871.
Despd. 11th }
Received 3rd November 1871 —

Enclosures 2

Submits the report showing the progress made with the Periyaur investigations during the past month. —

No. 2851 – 2852 – 10th Nov.

No. 183

No. 242 Special Executive Engineer's Office
Madura 25th October 1871

From,

R. Smith Esquire
Executive Engineer, On special duty
Madura District

To,

Major R. F. Oakes R.E.,
Acting Chief Engineer for Irrigation
Madras.

Sir,

As directed in your Letter, No. 171, of 20th Instant, I have the honor to submit the subjoined estimate of the probable sum required, to complete the field-work in the Periyaur Hill tracts.

	Rupees
Clearing Jungle	1,400
Sinking trial pits	2,000
Erecting Huts	200
Petty Establishment	500
Salaries of Lascars, required at the old Camp, in connection with the gauging of the Periyaur	240
Sundries	160
Total Rs	4,500

2. From Lieutenant Greer's recent letters it appears that the Central, or No. 2 Site, is the best of the three alluded to in my Monthly report, for September last; but the Country is evidently so very deceptive, in those parts, that nothing can be safely assumed until the Completion of the Contour Survey. Lieutenant Christie's description of the Perryaur valley, below the bend, is probably correct, and if his Conjecture, regarding the non-existence of a site for the Reservoir embankment, is verified no expenditure will be incurred there.

I have the honor to be
Sir,
Your Most Obedient Servant
J. Smith
Executive Engineer
On special duty
Madura Distt.

Public Works 1871 Department

No. 242

at once

From.

No. 5243

The Executive Engineer
On special duty
Madura Dist.

To.

The Actg. Chief Engr.
for Irrigation
Madras.

Dated 25th }
Despd. 25th } October 1871.
Received. D.
" 3rd November 1871.

Submits, as directed, of the probable sum required to Complete the field-work in the Perriyaur Hill Tracts; and informs that No. 2 Site is the best of the three alluded to in his Monthly Report for September last.

P. W. 10 Nov / 71 D / 183

Perryaur Project

Table of Rainfall and Discharge of Perryaur during September 1871

Date	Rainfall at Perriar Camp Inches	Rainfall at Fythry Tavalam Inches	Hours	Water level in feet above datum	Discharge C feet per Second	Discharge 1000 c yds per day	Date	Rainfall at Perriar Camp Inches	Rainfall at Fythry Tavalam Inches	Hours	Water level in feet above datum	Discharge C feet per Second	Discharge 1000 c yds per day
Sept 1	0.02	0.03	6 a.m	0.69	515	1597	Sept 16	0.01	0.01	6 a.m	1.25	731	2208
			6 p.m	0.60	483					6 p.m	1.05	649	
" 2	0.23	0.16	6 a.m	0.45	435	1378	" 17	0.00	0.06	6 a.m	0.95	609	1901
			6 p.m	0.42	426					6 p.m	0.87	579	
" 3	1.15	0.48	6 a.m	0.45	435	1392	" 18	0.00	0.13	6 a.m	0.95	609	1861
			6 p.m	0.45	435					6 p.m	0.80	554	
" 4	0.03	0.02	6 a.m	1.30	752	2242	" 19	0.00	0.15	6 a.m	0.65	501	1603
			6 p.m	1.05	649					6 p.m	0.65	501	
" 5	0.41	0.05	6 a.m	2.03	1160	3059	" 20	0.00	0.06	6 a.m	0.52	457	1442
			6 p.m	1.30	752					6 p.m	0.48	444	
" 6	0.15	0.05	6 a.m	3.55	2079	5045	" 21	0.05	0.05	6 a.m	0.37	418	1322
			6 p.m	1.90	1074					6 p.m	0.37	413	
" 7	0.16	0.45	6 a.m	1.80	1012	2933	" 22	0.01	0.01	6 a.m	0.33	402	1344
			6 p.m	1.45	821					6 p.m	0.37	413	
" 8	0.09	0.27	6 a.m	1.82	1024	3086	" 23	0.06	0.02	6 a.m	0.35	408	1267
			6 p.m	1.62	905					6 p.m	0.25	384	
" 9	0.25	0.52	6 a.m	1.40	798	2894	" 24	0.00	0.00	6 a.m	0.25	384	1258
			6 p.m	1.80	1011					6 p.m	0.33	402	
" 10	0.28	0.42	6 a.m	2.27	1318	4672	" 25	0.00	0.01	6 a.m	0.25	384	1210
			6 p.m	2.75	1602					6 p.m	0.20	372	
" 11	0.06	0.05	6 a.m	2.30	1337	3878	" 26	0.14	0.01	6 a.m	0.12	384	1069
			6 p.m	1.92	1087					6 p.m	0.07	314	
" 12	0.42	0.51	6 a.m	1.75	981	2938	" 27	0.15	0.44	6 a.m	0.10	349	1192
			6 p.m	1.52	855					6 p.m	0.30	396	
" 13	0.16	0.30	6 a.m	1.66	927	3222	" 28	0.03	0.01	6 a.m	0.38	415	1346
			6 p.m	1.92	1087					6 p.m	0.42	426	
" 14	0.01	0.10	6 a.m	1.75	981	2883	" 29	0.17	0.06	6 a.m	0.25	384	1192
			6 p.m	1.45	821					6 p.m	0.15	361	
" 15	0.02	0.25	6 a.m	1.30	752	2346	" 30	0.04	0.12	6 a.m	0.25	384	1258
			6 p.m	1.22	714					6 p.m	0.33	402	
							Total	4.10	4.80			Total	65,038

Depth run off from Catchment Basin of 250 square miles = 3.02 inches Mean

Mean discharge { 2,167,933 Cubic yards per diem
90,330 " " " " hour
677 Cubic feet per Second

	Cubic yds
Discharge of Perryaur in September 1869	67,424,000
Do — of — do in September 1871	65,038,000
Difference - Excess in September 1869	2,386,000

J. Smith.

Executive Engineer
On Spl. duty
Madura Distt

Spl. Exe. Engrs Office
Madura 10th October 1871

Compared by G.M.R.
" W.M.

Enclosure No. 1 in a letter from the Executive Engineer On Special duty Madura District dated 10th October 1871.

No. 220.

To

The Actg. Chief Engr.
for Irrigation
Ft. Fort Saint George
1/10/71

Table of Rainfall and discharge of Perryaur during September 1871.

P. W. 10th Nov/71 Sub. 183.

Liv Parts (?) Engrs

Public Works Departt
No 2851. 19

Proceedings of the Madras Government

Read the following

From The Executive Engineer on special duty Madura Dist. {H.E. No 220 of 10 Octr/71}

From The Executive Engr on special duty Madura District {H.E. No 242 of 25 October 1871}

As the Perryar project is proposed to be undertaken from Loan funds, and the Government of India have authorized the Cost of the Survey Establishment employed in Connection with it to be charged to those funds, & as the Reserve under Agricultural Ordinary has been exhausted, the sanction of that Government will be requested to the appropriation of the sum of Rs 4500 which is

stated to be urgently required for Completing the field work in the Cirgar Hill tracts, from the grant for the Pelandrai project in the South Arcot District (Item No 38) on which the outlay, it is expected, will fall short of the allotment. As it is of the utmost importance that the investigation of the Project shd. be completed as expeditiously as possible.

(Docket No 2852 d/

32

Copy of the above forwarded to the Govt. of India.

6 To the Supdg. Engineer 5th & 8th Divn/
3 R. Executive Engineer/
5 " Controller/
4 Ch. Engineer for Irrign./

J.

Despd. 13/11/71.

Nov. 3d. + Despd. 20/11/71.

Despd. 13/11/71.

No. 5243.

Govt. of (1871) Madras.

PUBLIC WORKS.

To The Superintending Engineer
6th Division

Dated

Recd. Encl. 2

G. O., 10th Novr. 1871, No. 2851-2852

Nos. 183 @ 186

Perryaur Project. The Sanction of the Govt. of India promised to be obtained to certain appropriation of funds for works in connection with the Perryaur Project.

Docket

Requesting sanction to certain appropriation of funds for works in connection with the Perryaur Project.